

AMENDMENTS TO THE CLAIMS

Upon entry of this amendment, the following listing of claims will replace all prior versions and listings of claims in the pending application.

IN THE CLAIMS

Please cancel claims 14 and 32, amend claims 9 and 27 and add claims 45-56 as follows:

1-8. (Canceled)

9. (Currently Amended) A method of pooling by an interface unit a transport layer connection to a server, the method comprising the steps of:

(a) receiving, by an interface unit, a first request of a first client to access a server, the first client and the interface unit communicating via a first transport layer connection;

(b) identifying, by the interface unit, that the interface unit has a second transport layer connection established with the server indicated by the first request;

(c) determining, by the interface unit, from monitoring application layer data of network traffic received by the interface unit that a second client and the server are not transferring data for a second request via the second transport layer connection;

(d) transmitting, by the interface unit, the first request via the second transport layer connection in response to the determination of step (c) and prior to receiving, by the interface unit, one of a finish command or a reset command from the second client;

(e) determining, by the interface unit, from monitoring application layer data of network traffic received by the interface unit that the second client and the server are transferring data for the second request via the second transport layer connection in response to receiving a third request from one of the first client or the second client to access the server; and

(f) establishing, by the interface unit, a third transport layer connection with the server in response to the determination of step (e).

10. (Previously Presented) The method of claim 9, comprising receiving, by the interface unit, the second request to access the server via one of the first client, the second client or a third client.

11. (Previously Presented) The method of claim 9, comprising intercepting, by the interface unit, one of the first request, the second request or the third request.

12. (Previously Presented) The method of claim 9, wherein step (b) comprises identifying, by the interface unit, the server from a destination internet protocol address of a network packet of the first request.

13. (Previously Presented) The method of claim 9, wherein step (b) comprises identifying, by the interface unit, the server from a path name of the first request.
14. (Cancelled).
15. (Previously Presented)) The method of claim 9, wherein step (c) comprises determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have completed transferring data.
16. (Previously Presented) The method of claim 9, wherein step (c) comprises determining, by the interface unit, via one or more chunk-size fields of monitored application layer data that the second client and the server have completed transferring data.
17. (Previously Presented) The method of claim 9, wherein step (e) comprises determining, by the interface unit, from monitored application layer data that the second client and the server have not completed a transfer of a last byte of data of a response to the second request.
18. (Previously Presented) The method of claim 9, wherein step (e) comprises determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have not completed transferring data.
19. (Previously Presented) The method of claim 9, wherein step (e) comprises determining, by the interface unit, via one or more chunk-size fields of monitored application layer data that the second client and the server have not completed transferring data.
20. (Previously Presented). The method of claim 9, comprising inserting, by the interface unit, information in the first request of the first client to indicate to the server to keep a transport layer connection open.
21. (Previously Presented) The method of claim 9, wherein step (f) comprises waiting, by the interface unit, to use the second transport layer connection to transmit the third request.
22. (Previously Presented) The method of claim 21, comprising receiving, by the interface unit, an acknowledgement from the second client that transferring of data between the second client and the server via the second transport layer connection has completed.
23. (Previously Presented) The method of claim 22, comprising transmitting, by the interface unit, the third request via the second transport layer connection in response to receiving the acknowledgement and prior to receiving a request to close a transport layer connection between the second client and the server.
24. (Previously Presented) The method of claim 9, comprising receiving, by the interface unit, a response to the first request from the server via the second transport layer connection, and transmitting the response to the first client via the first transport layer connection.

25. (Previously Presented) The method of claim 9, wherein one of the first request, the second request or the third request comprises a request to open a transport layer connection.

26. (Previously Presented) The method of claim 9, comprising transmitting, by the interface unit, the third request via the third transport layer connection.

27. (Currently Amended) An interface unit for pooling a transport layer connection to a server, the interface unit comprising:

means for receiving a first request of a first client to access a server, the first client and the interface unit communicating via a first transport layer connection;

means for identifying that the interface unit has a second transport layer connection established with the server indicated by the first request;

means for ascertaining that a second client and the server from monitoring application layer data of network traffic received by the interface unit are not transferring data for a second request via the second transport layer connection and transmitting the first request via the second transport layer connection;

means for transmitting the first request via the second transport layer connection in response to the means for ascertaining and prior to receiving one of a finish command or a reset command from the second client;

means for determining ~~that the second client and the server~~ from monitoring application layer data of network traffic received by the interface unit that the second client and the server are transferring data for the second request via the second transport layer connection in response to receiving a third request from one of the first client or the second client to access the server; and

means for establishing a third transport layer connection with the server in response to the determination.

28. (Previously Presented) The interface unit of claim 27, comprising means for receiving the second request to access the server via one of the first client, the second client or a third client.

29. (Previously Presented) The interface unit of claim 27, comprising means for intercepting one of the first request, the second request or the third request.

30. (Previously Presented) The interface unit of claim 27, comprising means for identifying the server from a destination internet protocol address of a network packet of the first request.

31. (Previously Presented) The interface unit of claim 27, comprising means for identifying the server from a path name of the first request.

32. (Cancelled).

33. (Previously Presented) The interface unit of claim 27, comprising means for determining via a content length parameter of monitored application layer data that the second client and the server have completed transferring data.

34. (Previously Presented) The interface unit of claim 27, comprising means for determining via one or more chunk-size fields of monitored application layer data that the second client and the server have completed transferring data.

35. (Previously Presented) The interface unit of claim 27, comprising means for determining from monitored application layer that the second client and the server have not completed a transfer of a last byte of data of a response to the second request.

36. (Previously Presented) The interface unit of claim 27, comprising means for determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have not completed transferring data.

37. (Previously Presented) The interface unit of claim 27, comprising means for determining via one or more chunk-size fields of monitored application layer data that the second client and the server have not completed transferring data.

38. (Previously Presented) The interface unit of claim 27, comprising means for inserting information in the first request of the first client to indicate to the server to keep a transport layer connection open.

39. (Previously Presented) The interface unit of claim 27, comprising means for waiting to use the second transport layer connection to transmit the third request instead of establishing the third transport layer connection.

40. (Previously Presented) The interface unit of claim 39, comprising means for receiving an acknowledgement from the second client that transferring of data between the second client and the server via the second transport layer connection has completed.

41. (Previously Presented) The interface unit of claim 40, comprising means for transmitting the third request via the second transport layer connection in response to receiving the acknowledgement and prior to receiving a request to close a transport layer connection between the second client and the server.

42. (Previously Presented) The interface unit of claim 27, comprising means for receiving a response to the first request from the server via the second transport layer connection, and transmitting the response to the first client via the first transport layer connection.

43. (Previously Presented) The interface unit of claim 27, wherein one of the first request, the second request or the third request comprises a request to open a transport layer connection.

44. (Previously Presented) The interface unit of claim 27, comprising means for transmitting the third request via the third transport layer connection.

45. (New) A method of pooling by an interface unit a transport layer connection to a server, the method comprising the steps of:

(a) receiving, by an interface unit, a first request of a first client to access a server, the first client and the interface unit communicating via a first transport layer connection;

(b) identifying, by the interface unit, that the interface unit has a second transport layer connection established with the server indicated by the first request;

(c) determining, by the interface unit, from monitoring application layer data of network traffic received by the interface unit that a second client and the server are not transferring data for a second request via the second transport layer connection;

(d) transmitting, by the interface unit, the first request via the second transport layer connection in response to the determination of step (c);

(e) determining, by the interface unit, from monitoring application layer data of network traffic received by the interface unit that the second client and the server have not completed a transfer of a last byte of data of a response to the first request via the second transport layer connection in response to receiving a third request from one of the first client or the second client to access the server; and

(f) establishing, by the interface unit, a third transport layer connection with the server in response to the determination of step (e).

46. (New) The method of claim 45, comprising receiving, by the interface unit, the second request to access the server via one of the first client, the second client or a third client.

47. (New) The method of claim 45, wherein step (c) comprises determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have completed transferring data.

48. (New) The method of claim 45, wherein step (c) comprises determining, by the interface unit, via one or more chunk-size fields of monitored application layer data that the second client and the server have completed transferring data.

49. (New) The method of claim 45, wherein step (e) comprises determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have not completed transferring data.

50. (New) The method of claim 45, The method of claim 9, wherein step (e) comprises determining, by the interface unit, via one or more chunk-size fields of monitored application layer data that the second client and the server have not completed transferring data.

51. (New) An interface unit for pooling a transport layer connection to a server, the interface unit comprising:

means for receiving a first request of a first client to access a server, the first client and the interface unit communicating via a first transport layer connection;

means for identifying that the interface unit has a second transport layer connection established with the server indicated by the first request;

means for ascertaining from monitoring application layer data of network traffic received by the interface unit that a second client and the server are not transferring data for a second request via the second transport layer connection and transmitting the first request via the second transport layer connection;

means for transmitting the first request via the second transport layer connection in response to the means for ascertaining;

means for determining from monitoring application layer data of network traffic received by the interface unit that the second client and the server have not completed a transfer of a last byte of data of a response to the first request via the second transport layer connection in response to receiving a third request from one of the first client or the second client to access the server; and

means for establishing a third transport layer connection with the server in response to the determination.

52. (New) The interface unit of claim 51, comprising means for receiving the second request to access the server via one of the first client, the second client or a third client.

53. (New) The interface unit of claim 51, comprising means for determining via a content length parameter of monitored application layer data that the second client and the server have completed transferring data.

54. (New) The interface unit of claim 51, comprising means for determining via one or more chunk-size fields of monitored application layer data that the second client and the server have completed transferring data.

55. (New) The interface unit of claim 51, comprising means for determining, by the interface unit, via a content length parameter of monitored application layer data that the second client and the server have not completed transferring data.

56. (New) The interface unit of claim 55, comprising means for determining via one or more chunk-size fields of monitored application layer data that the second client and the server have not completed transferring data.